



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-------------------------|---------------------|------------------|
| 09/509,603      | 04/06/2000  | NICOLA JOHN POLICICCHIO | 6873                | 1426             |

7590 04/30/2004

ROBERT B AYLOR  
THE PROCTER & GAMBLE COMPANY  
SHARON WOODS TECHNICAL CENTER  
11520 REED HARTMAN HIGHWAY  
CINCINNATI, OH 45241-2422

EXAMINER

WINTER, GENTLE E

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1746

DATE MAILED: 04/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/509,603

Applicant(s)

POLICICCHIO ET AL.

Examiner

Gentle E. Winter

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11-36, 49 and 51 is/are pending in the application.
- 4a) Of the above claim(s) 11-30 and 32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31, 33-36, 49, and 51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 15 March 2004 has been entered.

### *Response to Arguments*

2. The Remarks state that it is the belief that the Office action of 12 January 2004 fails to make a *prima facie* case of obviousness. In support of the argument, the Remarks quote MPEP section 2143. Thereafter the remarks make the following arguments:

1. The '569 patent teaches superabsorbent materials in mop heads. However, nothing therein teaches or suggests the problem associated with the use of such mop heads with detergent solutions containing high levels of detergent surfactants. This problem was discovered by the present Applicants.

1a. In response, the Remarks appear to acknowledge that the mop head is well known in the art, which is the position of the Office. The next issue, related to levels of detergent surfactants, is clearly laid out in paragraph 2.

2. It necessarily follows that, '569 does not suggest any solution to the problem. Said another way, '569 deals only with the mop head and is entirely silent regarding the appropriate range of surfactant for use with the mop head.

Art Unit: 1746

2a. Again the position set forth in the Remarks is believed to be consistent with the Office action. The reference disclosing the mop does not speak to the claimed surfactant concentration.

3.) To fill that lacuna, one has to turn to the literature. However, absent some appreciation of the problem discovered by Applicants herein, to what literature does one turn? Of all the hard surface cleaning compositions known in the art, why would one turn to the cited EPO '219, U.S. '664 and U.K. '323 documents, if it were not for the hindsight gained by Applicants having first discovered the surfactant problem?

3a. The Remarks are correct, to "fill that lacuna" one does turn to the literature. The remarks next state: absent some appreciation of the problem discovered by Applicants herein, to what literature does one turn?" and asks: "why would one turn to the cited EPO '219, U.S. '664 and U.K. '323 documents, if it were not for the hindsight gained by Applicants having first discovered the surfactant problem?" The fact that the prior art discloses multitudes of effective combinations does not render any particular combination less obvious. This is especially true because the claimed composition is used for the identical purpose taught by the prior art (hard surface cleaner. See *e.g.* Title of '219. See *In re Corkill*, 771 F.2d 1496, 1500, 226 USPQ 1005, 1008 (Fed. Cir. 1985) (obviousness rejection of claims affirmed in light of prior art teaching that "hydrated zeolites will work" in detergent formulations, even though "the inventors selected the zeolites of the claims from among 'thousands' of compounds"); *In re Susi*, 440 F.2d 442, 445, 169 USPQ 423, 425 (CCPA 1971) (obviousness rejection affirmed where the disclosure of the prior art was "huge, but it undeniably include[d] at least some of the compounds recited in appellant's generic claims and it is of a class of chemicals to be used for the same purpose as appellant's additives").

Art Unit: 1746

Additionally, the motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved. See *Dembiczak*, 175 F.3d at 999, 50 USPQ2d at 1617. In addition, the teaching, motivation or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. See *WMS Gaming, Inc. v. International Game Tech.*, 184 F.3d 1339, 1355, 51 USPQ2d 1385, 1397 (Fed. Cir. 1999). The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981) (and cases cited therein).

There is simply nothing to suggest that the admittedly known mop and the admittedly known hard surface cleaner would not be used together. The references themselves disclose reasons for making the combinations, admittedly not the same reasons set forth in the application, but the motivation need not be the same as Applicants'. The fact that Applicant makes the combination for a different purpose does not alter the conclusion that its use in a prior art device would be prima facie obvious from the purpose disclosed in the reference. *In re Lintner*, 173 USPQ 560.

4.) Moreover, even if one were to turn to U.K. '323, as suggested by the Examiner's grounds for rejection, the surfactant levels disclosed therein are too high to solve the problem. So, in fact, '323 teaches away from Applicants' solution to the problem.

4a. This '323 reference was not relied on for surfactant concentration, the '219 reference was relied on to teach the concentration. In any case, the claimed range, "from about 0.05% to more than 0.4% is substantively disclosed in the '323 reference, which discloses 0.5% to 10%, it is noted that the specification at page 6 states: "the level of detergent surfactant in the cleaning solution should be from about 0.01% to about 0.5 %, more preferably from about 0.05% to about 0.4%...". Therefore the reference does in fact disclose a workable combination (albeit not the currently claimed combination).

5.) If one were to turn to U.S. '664, one would find a low surfactant level, but would find no basis for selecting such compositions for use in combination with the '569 mop heads containing superabsorbents.

5a. A careful reading of paper 011204 (the final rejection) will show that the '664 reference was relied on to show inherency, not as a substitute for any reference. See page 5, line 4 *et seq.* Furthermore, as indicated above the mop is suitable for use with the compositions and the references themselves provide the motivation for making the claimed combination.

6.) Likewise, turning to EP '219, one finds no basis for selecting the disclosed compositions for use in combination with mop heads containing superabsorbents. Assuming *arguendo* that all the individual components of the present invention (other than the key recitation of the superabsorbent/surfactant level problem) can be found in the combination of cited documents. The BPAI had held that this is not the test of *prima facie* obviousness under 35 U.S.C. §103. See *Ex parte Hiyamizu*, 10 USPQ2d 1393,1394 (BPAI 1988).

6a. The reliance on *Ex parte Hiyamizu* is believed to be misplaced, *Hiyamizu* indicates that where the examiner has relied on the teachings of several references, the test is whether or not the references viewed individually and collectively would have suggested the claimed invention

Art Unit: 1746

to the person possessing ordinary skill in the art. Note *In re Kaslow*, 707 F.2d 1366, 217 USPQ 1089 (Fed. Cir. 1983). The Court continued:

[T]here should be something in the prior art or a convincing line of reasoning in the answer suggesting the desirability of combining the reference in such a manner as to arrive at the claimed invention. Note *In re Deminski*, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986) *Hiyamizu* at 1394

In the instant case, the prior art does suggest using a surfactant solution with a mop. The prior art of record apparently failed to recognize the problem identified by applicant, that is overloading the mops' superabsorbent material. It is not the position of the Office that the same motivation is present, but rather that some motivation is present. Moreover, it is acknowledged that superabsorbent materials are more readily overloaded with surfactant solutions than with pure water on a g/g basis. This position of the Office, taken in this action, is that there is something in the prior art and a convincing line of reasoning suggesting the desirability of combining the reference in the instant manner as to arrive at the claimed invention.

3. For at least the foregoing reasons the rejections are maintained.

***Claim Rejections - 35 USC § 103—Maintained***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 1746

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 31, 33-36, 49 and 51, are rejected under 35 U.S.C. 103(a) as being unpatentable over EPO 0 503 219 A1 ('219) and United States Patent No. 5,538,664 to Michael and United States Patent No. 5,638,569 to Newell (Newell) and English patent 1,357,323.

3. With specific respect to claim 31, 33, 49, and 51 are drawn to a kit comprising an element, a pad containing superabsorbent material having a capacity for water of at least 15g/g when measured under a confining pressure of 0.3 PSI, and a detergent composition containing no more than about 0.4% by weight of detergent surfactant, less than 5% by weight of a solvent, and an alkanolamine in an amount sufficient to provide a pH of more than about 9, said alkaline material comprising a volatile alkanolamine. Claim 49 discloses that the volatile alkanolamine is 2-amino 2-methylpropanol. As to the first limitation drawn to the presence of a superabsorbent capable of absorbing at least 15 g/g Newell discloses a mop with a superabsorbent head see e.g. column 10 line 62 *et seq.* Superabsorbents generally have a retention range from order 10 g/g to order 100 g/g or more for demineralized water. For instance, acrylamide potassium acrylate copolymer has a 60g/g capacity, marketed under the name AQUASORB®.

4. As to the limitation regarding the detergent composition containing about 0.0001% to about 0.2% by weight of a "hydrophilic shear thinning polymer" and 0.05% to no more than 0.4% by weight of detergent surfactant, less than about 5% by weight of a solvent, and an alkanolamine in an amount sufficient to provide a pH of more than about 9. The '219 reference discloses a cleaning composition for the cleaning of hard surfaces, see e.g. title, and a detergent

Art Unit: 1746

with a surfactant with 0.04%-1% of surfactant, from 0.001% to 1% of an alkanolamine. See page 4 line 4. More specifically, as disclosed in claim 51, 2-aminomethyl propanol, is taught as a specific alkanolamine at *inter alia* page 2, line 46. Because the composition is the seemingly identical, the pH would apparently be identical. However, to be rigorous, Michael discloses a composition having a pH of from about 6 to about 12.5, preferably from about 7 to about 11.5, more preferably from about 10 to about 11.5, for cleaning. Michael further discloses that the compositions can also contain, optionally, small amounts of additional surfactants and/or buffering system, “especially the alkanolamines described hereinafter” to maintain the desired pH. See e.g. column 1, line 25 *et seq.* of Michael. While the claimed pH is believed to be inherent in ‘219, Michael is provided for an explicit teaching. To the extent that the pH was not adjusted in ‘219, the artisan would have been motivated to adjust the pH to facilitate improved cleaning. Additionally, the pH may be kept fairly high to control compositional stability and preserve product efficacy.

5. As to the added limitation that the composition includes the addition of a 0.0001% to about 0.2%, by weight, of a “hydrophilic shear thinning polymer”. The ‘323 reference discloses the addition of the disclosed “hydrophilic shear thinning polymer” but refers to it as a “polysaccharide hydrocolloid”. The ‘323 reference explicitly provides the motivation for adding the compound to the composition. Namely, as a means for decreasing foaming properties of aqueous hard surface cleaning compositions that also include a surface active agent (surfactant).

Art Unit: 1746

6. Each and every limitation of claims 31, 33, and 49 is disclosed in '219, '323, and Michael the as set forth above, except that combination fails to explicitly disclose use with the superabsorbent mop. The compositions are disclosed for use with cleaning hard surfaces but the specific type of mop is not disclosed. Newell provides the missing element and explicitly provides the motivation for making the instant combination. Specifically, Newell provides "For example, in a single-use mop application, the strand elements may be impregnated or otherwise have associated therewith a super-absorbent material. Such super-absorbents, or hydrogels, may be of any suitable type, and are readily commercially available from a variety of sources", Newell goes on to enumerate *inter alia* "Aquasorb" sorbent manufactured by Aqualon, Wilmington, Del. See e.g. column 10 line 62 *et seq.* Newell also provides the motivation for making the combination, namely: "In order to enhance fluid take-up and retention capacity in wet mopping applications". See e.g. column 10 line 62 *et seq.*

7. As to claims 34, 35, and 36 disclosing that the composition used in the process includes a suds suppressor and is used on a ceramic floor or other specified floor. With respect to the limitation that the floor be ceramic, it has been held that to be entitled to weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 1962 C.D. 408 (1961). As to the suds suppressor, this is a common additive and was well within the grasp of the artisan at the time of invention. Michael discloses the same in claim 7. One motivation for including a suds control system is to optimize cleaning performance, and minimize or eliminate required rinsing.

***Conclusion***

4. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gentle E. Winter whose telephone number is (571) 272-1310. The examiner can normally be reached on Monday-Friday 7:00-3:30.

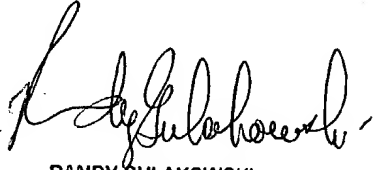
Art Unit: 1746

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gentle E. Winter  
Examiner  
Art Unit 1746

22 April 2004



RANDY GULAKOWSKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700